

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A wafer processing apparatus including a mini-environment portion having a chamber therein that is pressurized to a pressure higher than that of the exterior thereof and used for transferring a wafer between a clean box having a lid and housing the wafer and the chamber, said apparatus comprising:

a first opening portion which is formed on a part of a wall comprising the chamber to be in communication with the chamber, facing to an opening of the clean box so as to allow loading and unloading the wafer between the clean box and the mini-environment portion;
and

a door that closes, when the transfer of the wafer is not performed, the first opening portion and opens, when the transfer of the wafer is performed,

wherein a gas flow path from the chamber to the exterior of the mini-environment portion is located around the first opening portion and is formed such that a flow rate of gas flowing from the chamber to the exterior of the mini-environment portion in case that the wafer transferring operation is not performed becomes substantially equal to a flow rate of gas flowing out from a space formed from the chamber and the clean box in case that the wafer transferring operation is performed.

Claim 2 (Previously Presented): A wafer processing apparatus according to claim 1, wherein a gas flow path of the gas flowing out from the space formed from the chamber and the clean box in case that the wafer transferring operation is performed includes a space formed around the opening of the clean box, and

the gas does not flow into an inner space of the clean box.

Claim 3 (Original): A wafer processing apparatus according to claim 1, wherein a gas flow path of the gas flowing out from the chamber to the exterior of the mini-environment portion in case that the wafer transferring operation is not performed includes an aperture formed when the door closes the first opening portion.

Claim 4 (Canceled).

Claim 5 (Currently Amended): A wafer processing apparatus including a mini-environment portion forming a pressurized chamber therein, said apparatus comprising:

a first opening formed on a part of a wall of the pressurized chamber formed by the mini-environment, the first opening being configured to face an opening of a clean box so as to allow loading and unloading of a wafer between the clean box and the mini-environment portion;

a door configured to open and close the first opening; and

a gas flow path formed between the door and the first opening so as to encircle the first opening when the door is closed, wherein a flow rate of a gas flowing through the gas flow path is substantially equal to a flow rate of the gas flowing from the pressurized chamber to the exterior of the mini-environment portion through the opening when the door is opened.

Claim 6 (Previously Presented): The wafer processing apparatus according to claim 5, wherein a pressure inside of the pressurized chamber formed by the mini-environment is higher than an outside pressure by about 2 Pa.

Claim 7 (Previously Presented): The wafer processing apparatus according to claim 5, wherein the gas flow path is formed by chinks that are approximately 2 mm wide.

Claim 8 (Previously Presented): The wafer processing apparatus according to claim 5, further comprising:

a protruding wall disposed on an outer surface of the mini-environment in a circumference of the window opening.

Claim 9 (Previously Presented): The wafer processing apparatus according to claim 8, wherein the protruding wall further comprises an eave.

Claim 10 (Previously Presented): The wafer processing apparatus according to claim 5, wherein the door comprises projections from an outer most perimeter thereof such that, when the door is closed, only the projections are in contact with an outer surface of the wall of the chamber adjacent to the window opening.

Claim 11 (Previously Presented): The wafer processing apparatus according to claim 5, wherein, when the door is closed, no portions thereof are in contact with the wall of the chamber.

Claim 12 (Previously Presented): The wafer processing apparatus according to claim 5, wherein the door further comprises a slit opening.

Claim 13 (New): A wafer processing apparatus including a mini-environment portion forming a pressurized chamber therein, said apparatus comprising:

a first opening formed on a part of a wall of the pressurized chamber formed by the mini-environment, the first opening being configured to face an opening of a clean box so as to allow loading and unloading of a wafer between the clean box and the mini-environment portion;

a door configured to open and close the first opening; and

one or more gas flow paths formed at least at a vicinity of edges of the door, wherein a flow rate of a gas flowing through the gas flow path is substantially equal to a flow rate of the gas flowing from the pressurized chamber to the exterior of the mini-environment portion through the opening when the door is opened.

Claim 14 (New): A wafer processing apparatus according to claim 13, wherein the one or more gas flow paths include elongated flow paths provided substantially uniformly around the door.

Claim 15 (New): A wafer processing apparatus according to claim 14, wherein the door is in substantially the shape of a square.